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An Irish Experience in Establishing and Evaluating an Intern Led Teaching Programme

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Abstract

Near-Peer Teaching is a relatively new and expanding area of medical education. The benefit to medical students has been demonstrated in numerous contexts around the world. Our aim was to establish a structured Intern-Led Teaching (ILT) programme in the context of an Irish Intern Training Network affiliated to an Irish Medical School. We then sought to evaluate the success of this programme. Seventy interns were enrolled in the ILT programme and completed a Train the Trainer course involving teaching methods and skills of effective feedback. Following this, the intern tutors delivered several one-hour teaching sessions in small groups to final year medical students on a weekly basis. At the end of each teaching block, a feedback questionnaire was distributed to participating students to evaluate their experiences of this new teaching modality. Tutorial topics were varied. They included clinical examination, history taking, prescribing, and emergencies. Eighty-one percent of students found the intern-led tutorials to be beneficial compared to tutorials run by more senior doctors. Additionally, students felt that with intern led tutorials they could ask questions they otherwise would not. There was a more comfortable environment, and information taught was considered more relevant. A significant number of students felt less nervous about the final medical examinations after the intern-led tutorials. The establishment of a structured intern-led teaching programme was well received by final year medical students. This project shows that interns are a valuable teaching resource in the medical school and should be included in medical schools' curricula.

Introduction

Near Peer Teaching (NPT) is a relatively new concept in medical education, first described by Whitman in 1988¹. NPT is teaching delivered by a tutor who is one or more years senior to another trainee. In the context of medical education, this commonly refers to the teaching of medical students by junior doctors ^{2,3}. NPT programmes have been welcomed by medical educationalists worldwide as a valuable adjunct in the delivery of medical curricula ^{2, 4-8}, especially due to rising medical student numbers and increasing clinical commitments and constraints on consultants' time. This is of particular relevance to Irish medical schools which have seen a doubling in medical student numbers in recent years, in line with recommendations made in the Fottrell report⁹, while the health system has struggled to attract both junior doctors and consultants to work¹⁰.

NPT has been demonstrated to offer a number of advantages complementary to standard medical education – medical students tend to regard junior doctors as more approachable, and regard the teaching atmosphere as more relaxed¹¹. Recent medical graduates are also familiar with the curriculum and course material and the knowledge required for medical school examinations.

NPT is not only of benefit to medical students, it also provides an opportunity for medical graduates to learn how to teach in a structured manner¹². It is also a requirement by many regulatory bodies and in the good medical practice document by the GMC; it states that doctors should contribute to teaching and training of doctors and medical students¹³.

Upon graduation, medical graduates not only find themselves in the role of doctor, but also that of teacher. In Ireland, as is common in many countries, medical students attached to their team on rotation often look primarily to the junior doctors for teaching. This is often carried out informally, during ward rounds and clinics. In addition, many junior doctors would take students attached to their service for tutorials at patients' bedside.

In Ireland, medical students do not receive formal training in teaching skills while in medical school. Several medical schools have introduced peer lead teaching programmes including our medical school. This is a voluntary student-run peer-led teaching programme that allows senior medical students (fourth and final year) to provide tutorials to those in more junior years (first, second and third) with a particular emphasis on clinical examination and history-taking. This programme has been a success in the university, and is greatly appreciated by students. Near-peer teaching programmes have been trialled for medicine and other healthcare-related courses in a variety of institutions, with broadly positive results ^{3, 14}. Participating students have demonstrated improved performance in exams and greater confidence with the material³. We believe these programmes have a role in Irish medical education.

While we are aware of NPT programmes established in intern networks in Ireland¹⁵, there appears to be little, if any, literature evaluating its implementation. We seek to expand on this work and to establish a structured NPT programme in the context of an Irish Intern Training Network. We then sought to evaluate the programme and experiences of the recipients.

Methods

We developed a novel Intern Led teaching programme in which newly graduated doctors (interns) co-taught final medical year students. A group of 70 interns from the Dublin North East Intern Network volunteered to participate in delivering teaching sessions with final year students from the Royal College of Surgeons in Ireland (RCSI). A structured programme was established in conjunction with DNE Intern Network co-ordinators and faculty members of RCSI. Prior to commencement of the programme, participating interns underwent compulsory tutor training through a one day 'Train the Trainer' (TTT) course. This provided the interns with an introduction to teaching methods, skills of giving constructive feedback, teaching in the clinical setting.

In RCSI, final year medical students undertake an eight-week block of teaching provided by RCSI clinical lecturers and tutors. For this period they are based in Beaumont Hospital – the principal teaching hospital in the network. Over a sixteen-week period, two groups of students, totalling seventy-five in number, were divided into groups of six and assigned a medical or surgical intern on a weekly basis to provide a one hour teaching session. Complementary to these teaching sessions, a didactic lecture series was run for one hour each week. These lectures focused on clinical examination techniques.

A questionnaire was administered to assess the students' attitudes towards the near-peer teaching programme at the end of each eight week teaching block and to evaluate their attitudes and experiences of this new teaching modality.

Results

Seventy-five students responded to the anonymous questionnaire (Table 1). The vast majority (81%) of students found the tutorials to be beneficial. Tutorial topics covered by interns included clinical examination and history taking at the bedside, medical emergencies, surgical emergencies and prescribing. Compared to tutorials run by more senior doctors, students felt that they could

ask questions they otherwise would not in intern-led tutorials. Students also report that they felt more comfortable in intern-led tutorials compared to those with more senior doctors.

Table 1. Results of questionnaire administered to students after 8 week near-peer teaching programme. 75 students responded to the questionnaire.

Student attitudes regarding benefit of tutorials		Strongly Agree/Agree			
I found the knowledge obtained from the tutorials beneficial		81%			
I feel more confident performing clinical examinations after the tutorials		63%			
I feel more confident in my knowledge of medical & surgical emergencies after the tutorials		57%			
I feel more confident with prescribing after the tutorials		13%			
I feel more confident in my knowledge of medical & surgical emergencies after the tutorials		32%			
Student attitudes regarding interns as tutors					
I felt that I could ask interns questions that I would not ask more senior doctors		77%			
I felt that interns taught material that was more relevant to what I want to learn than more senior doctors		73%			
I felt that there was a comfortable atmosphere during the tutorials compared to those with more senior doctors		81%			
I felt less nervous about exams based on advice from intern tutors		55%			
		Strongly Disagree/Agree			
I felt that interns were not confident in their knowledge of material they were teaching compared to more senior doctors		65%			
When attached to a team, the person I would most likely approach with a question		Intern	SHO	Registrar	Consultant
		50%	40%	7%	3%

Students were satisfied with intern competence and reported that taught material was more relevant than content taught by more senior doctors. More than half of participating students felt less nervous about exams after the tutorials. Students said they were more likely to approach an intern compared to more senior staff (50%).

Discussion

NPT programmes have been shown to benefit students in various contexts. Previous research has shown that near-peer teachers are more approachable, and often seen as less threatening for students¹⁶. Our study supports these findings with the majority of students reporting a more comfortable learning environment created by near peer tutors. Ten Cate's group have emphasised the importance of creating a comfortable learning environment and its contribution to creating a positive learning experience for students¹⁷.

With an expanding number of medical students, constraints are being placed on clinicians' time to teach, and there is a shortage of trained teaching faculty. It is therefore important that to utilise all available resources. Interns are an excellent resource in delivering medical education. Their recent experiences with exams, combined with their practical application of this knowledge through clinical experience, gives them informed insight as teachers¹⁸.

The benefits to the tutors have also been established, particularly to continuing professional development¹⁹. Our cohort of near-peer teachers attended a Train the Trainer (TTT) course prior to commencing their tutor responsibilities. This provided them with an introduction to formal training in delivering medical education and helped to highlight desired learning outcomes.

Students were satisfied with the content of tutorials, and found them beneficial. The knowledge gained was regarded as being relevant, and they appreciated the opportunity to ask questions freely to a group of people who were close to their stage in their medical careers. Indeed, the fact that such a large group of tutors were able to deliver a satisfactory teaching programme shows that such a programme is possible in a large intern network without putting an undue workload on the tutors.

There were some limitations of our programme, including a lack of standardisation of teaching and the lack of clinical and teaching experience of near-peer tutors. Near peer tutors were autonomous in deciding the content of their tutorials. Indeed, the survey results show that students benefited mostly in the areas clinical examination and history-taking skills, and far less in the areas of prescribing and the management of medical and surgical emergencies. This indicates that interns and tutors may benefit from more assistance if they are to deliver tutorials on these latter topics.

We hope to overcome this in future years by establishing learning objectives for the programme, and having faculty supervise tutorials at random.

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Conflict of Interest:

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article

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